

SN. 10/634,727

ATTORNEY DOCKET NO. KIOI:031

IN THE CLAIMS

*The status of the claims as presently amended is as follows:*

1-3. (Canceled)

4. (Currently Amended) An engine torque control apparatus according to claim 2, further comprising:

a continuously variable transmission comprising a torque converter and a transmission mechanism, wherein said transmission mechanism includes a primary pulley, a secondary pulley, and a belt for transmitting power from the primary pulley to the secondary pulley;

an engine connected to an input shaft of said torque converter;

an engine torque control section that controls torque output from said engine;

discharged torque calculating means for calculating a discharged torque of at least one of said engine and said transmission; and

rotational speed detecting means for detecting a rotational speed of said primary pulley, wherein said engine torque control section controls torque of said engine according to the discharged torque calculated by said discharged torque calculating means,

wherein said discharged torque calculating means calculates a friction discharged torque produced by contact frictional force, generated when the pulleys sandwich the belt therebetween,

wherein said engine torque control section controls torque of the engine based on the calculated friction discharged torque,

wherein said discharged torque calculating means comprises inertia discharged torque calculating means for calculating an inertia discharged torque of said engine or said transmission,

wherein said engine torque control section controls torque of said engine according to the inertia discharged torque calculated by said inertia discharged torque calculating means, and

wherein said inertia discharged torque calculating means calculates an inertia discharged torque produced by rotation of said transmission mechanism according to the rotational speed detected by said rotational speed detecting means.

5. (Currently Amended) An engine torque control apparatus according to claim 2 or 4, further comprising:

a continuously variable transmission comprising a torque converter and a transmission

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mechanism, wherein said transmission mechanism includes a primary pulley, a secondary pulley, and a belt for transmitting power from the primary pulley to the secondary pulley;

an engine connected to an input shaft of said torque converter;

an engine torque control section that controls torque output from said engine;

discharged torque calculating means for calculating a discharged torque of at least one of said engine and said transmission; and

engine speed detecting means for detecting a revolutionary speed of a rotary shaft of said engine,

wherein said engine torque control section controls torque of said engine according to the discharged torque calculated by said discharged torque calculating means,

wherein said discharged torque calculating means calculates a friction discharged torque produced by contact frictional force, generated when the pulleys sandwich the belt therebetween,

wherein said engine torque control section controls torque of the engine based on the calculated friction discharged torque,

wherein said discharged torque calculating means comprises inertia discharged torque calculating means for calculating an inertia discharged torque of said engine or said transmission,

wherein said engine torque control section controls torque of said engine according to the inertia discharged torque calculated by said inertia discharged torque calculating means,  
and

wherein said inertia discharged torque calculating means calculates an inertia discharged torque produced by said rotary shaft of said engine according to the revolutionary speed detected by said engine speed detecting means.

6. (Currently Amended) An engine torque control apparatus according to claim 3 or 7, further comprising:

a continuously variable transmission comprising a torque converter and a transmission mechanism, wherein said transmission mechanism includes a primary pulley, a secondary pulley, and a belt for transmitting power from the primary pulley to the secondary pulley;

an engine connected to an input shaft of said torque converter;

an engine torque control section that controls torque output from said engine;

discharged torque calculating means for calculating a discharged torque of at least one of said engine and said transmission; and

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rotational speed detecting means for detecting a rotational speed of said primary pulley;  
wherein said engine torque control section controls torque of said engine according to the discharged torque calculated by said discharged torque calculating means,

wherein said discharged torque calculating means calculates a friction discharged torque produced by contact frictional force, generated when the pulleys sandwich the belt therebetween,

wherein said engine torque control section controls torque of the engine based on the calculated friction discharged torque,

wherein said discharged torque calculating means comprises friction discharged torque calculating means for calculating a friction discharged torque of said transmission,

wherein said engine torque control section controls torque of said engine according to the friction discharged torque calculated by said friction discharged torque calculating means,  
and

wherein said friction discharged torque calculating means calculates a rotational friction discharged torque produced by rotation of said transmission mechanism according to the rotational speed detected by said rotational speed detecting means.

7. *(Previously Presented)* An engine torque control apparatus comprising:

an automatic transmission comprising a torque converter and a transmission mechanism;

an engine connected to an input shaft of said torque converter;

an engine torque control section that controls torque output from said engine; and

discharged torque calculating means for calculating a discharged torque of at least one of said engine and said automatic transmission,

wherein said discharged torque calculating means comprises friction discharged torque calculating means for calculating a friction discharged torque of said automatic transmission,

wherein said engine torque control section controls torque of said engine according to the friction discharged torque calculated by said friction discharged torque calculating means,

wherein said automatic transmission is a V belt type continuously variable transmission constructed such that a pair of variable pulleys are connected to each other via a V belt and oil pressure is supplied to oil chambers provided in respective ones of the pulleys so that the gear ratio thereof is changeable,

wherein the engine torque control apparatus comprises line pressure detecting means for detecting an oil pressure of line pressure as a basis for oil pressure to be supplied to the

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respective ones of the pulleys, and

wherein said friction discharged torque calculating means calculates a friction discharged torque produced by contact frictional force, generated when the pulleys sandwich the V belt therebetween, based on the line pressure detected by said line pressure detecting means.

8-10. (*Canceled*)

11. (*Previously Presented*) An engine torque control apparatus comprising:

a continuously variable transmission comprising a torque converter and a transmission mechanism;

an engine connected to an input shaft of said torque converter;

angular acceleration calculating means for calculating an angular acceleration of an output shaft of said engine or an input shaft of said transmission;

an engine torque control section that controls torque output from said engine; and

discharged torque calculating means for calculating a discharged torque of at least one of said engine and said transmission,

wherein said discharged torque calculating means comprises inertia discharged torque calculating means for calculating an inertia discharged torque of said engine or said transmission based on the angular acceleration calculated by said angular acceleration calculating means, and

wherein said engine torque control section controls torque of said engine according to the inertia discharged torque calculated by said inertia discharged torque calculating means.

12. (*Previously Presented*) An engine torque control apparatus comprising:

a continuously variable transmission comprising a torque converter and a transmission mechanism;

an engine connected to an input shaft of said torque converter;

line pressure detecting means for detecting line pressure supplied to said transmission mechanism;

an engine torque control section that controls torque output from said engine; and

discharged torque calculating means for calculating a discharged torque of at least one of said engine and said transmission,

wherein said discharged torque calculating means comprises friction discharged torque

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calculating means for calculating a friction discharged torque of said transmission based on the line pressure detected by said line pressure detecting means, and

wherein said engine torque control section controls torque of said engine according to the friction discharged torque calculated by said friction discharged torque calculating means.

13. (New) An engine torque control apparatus according to claim 4, further comprising:

engine speed detecting means for detecting a revolutionary speed of a rotary shaft of said engine,

wherein said inertia discharged torque calculating means calculates an inertia discharged torque produced by said rotary shaft of said engine according to the revolutionary speed detected by said engine speed detecting means.

14. (New) An engine torque control apparatus according to claim 7, further comprising:

rotational speed detecting means for detecting a rotational speed of said primary pulley,

wherein said friction discharged torque calculating means calculates a rotational friction discharged torque produced by rotation of said transmission mechanism according to the rotational speed detected by said rotational speed detecting means.